

Patent Claims:

1. A method for heating components, in particular components of gas turbines, prior to and/or during further processing of same, characterized in that at least one laser device is used as the energy source for heating.
2. The method as recited in Claim 1, characterized in that the component is irradiated at least on one side by the or each laser device.
3. The method as recited in Claim 1 or 2, characterized in that the component is irradiated on two sides from two irradiation directions using laser radiation, one laser device being preferably used for each irradiation direction.
4. The method as recited in Claim 1 or 2, characterized in that the component is irradiated on all sides from multiple irradiation directions using laser radiation, one laser device being preferably used for each irradiation direction.
5. The method as recited in one or more of Claims 1 through 4, characterized in that angles of incidence at which the laser beams hit the or each surface of the component to be heated are adjusted to the contour of the respective surface.
6. The method as recited in one or more of Claims 1 through 5, characterized in that the heating of the component is measured and, as a function thereof, heating is controlled in such a way that the power of the or each laser device is adjusted in order to achieve an intended temperature setpoint value.
7. The method as recited in Claim 6, characterized in that the heating of the component and measurement of the heating are carried out contact-free.

8. The method as recited in one or more of Claims 1 through 7, characterized in that one or multiple diode laser(s) is/are used as the laser device(s).
9. The method as recited in one or more of Claims 1 through 8, characterized in that the component is designed as a component of a gas turbine, in particular as a turbine blade of a gas turbine, the gas turbine component being subjected to further processing after or during heating.
10. The method as recited in Claim 9, characterized in that the gas turbine component is subjected to laser hardfacing after or during heating, a separate laser device being used for the laser hardfacing process.